

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for classifying defects comprising:
imaging an ~~inspected~~ object by illuminating and scanning an electron beam and
detecting with a ~~pair of detectors disposed at angles from said object and detectors disposed~~
~~above said object;~~
extracting images of a defect candidate from images obtained by each of said
detectors ~~by at~~ said imaging step and calculating defect information of said defect candidate ~~from~~
~~each of the images obtained by said detectors;~~ said calculated defect information including
defect surface shape information, pattern defect information and voltage contrast defect
information;
classifying said extracted defect candidate image into a first category by using
said calculated defect information;
classifying said extracted defect candidate image into a second category; and
displaying on a screen said extracted defect candidate image together with first
and second classification information, said first classification information relating to said first
category, said second classification information relating to said second category,
wherein said step of classifying said extracted defect candidate image into said
second category is performed by comparing a circuit pattern area and a defect area, said circuit
pattern area being obtained from a reference image and said defect area being obtained from said
imaging extracting step.
2. (Canceled)
3. (Original) The method for classifying defects as described in claim 1
wherein said first category relates to defect criticality.

4. (Original) The method for classifying defects as described in claim 3 wherein said second category relates to defect type.

5. (Original) The method for classifying defects as described in claim 4 wherein said defect type includes one or more of the following: particle defects, flaw defects, circuit pattern short defects, and circuit pattern open defects.

6. (Currently Amended) A method for classifying defects comprising:
imaging an object by illuminating and scanning an electron beam and detecting with ~~a plurality of first detectors disposed at angles from said object and a plurality of second detectors disposed above said object;~~
extracting images of a defect candidate from images obtained from said ~~first and second~~ detectors and calculating defect information of said defect candidate ~~using said images obtained by said first and second detectors;~~ said calculated defect information including defect surface shape information, pattern defect information and voltage contrast defect information;
classifying said extracted defect candidate image into at least one defect type by using said calculated defect ~~candidate~~ information;
evaluating criticality of defect of said defect candidate image that has been classified into said at least one defect type; and
displaying on a screen said extracted defect candidate image together with first and second information, said first information relating to said classification of defect type, and said second information relating to said evaluation of said criticality of defect[.].
~~wherein said evaluating step is performed by comparing a circuit pattern area and a defect area, said circuit pattern area being obtained from a reference image, said defect area being derived from said imaging step, said extracted defect candidate image being extracted from said defect area.~~

7. (Previously Presented) The method for classifying defects as described in claim 6 wherein said imaging of said object is performed by illuminating and scanning an

electron beam focused on said object and detecting, in synchronization with said scanning, secondary electrons generated from said object by said illumination.

8. (Original) The method for classifying defects as described in claim 6 wherein said defect types for classification include one or more of the following: particle defects, flaw defects, circuit pattern short defects, and circuit pattern open defects.

9. (Currently Amended) A method for classifying defects comprising:
imaging an object by illuminating and scanning an electron beam and detecting with ~~a plurality of first detectors disposed at angles from said object and a plurality of second detectors disposed above said object;~~

~~extracting first images of defect candidates from second images obtained by said first and second detectors and calculating defect information of said defect candidate using said second images obtained by said first and second detectors;~~

~~classifying said extracted defect candidate images into a first category by using said calculated defect information candidate;~~

~~classifying said extracted defect candidate images into a second category, said second category relating to a predicted yield from said inspected object; and~~

~~displaying on a single screen a distribution on said inspected object of said defect candidates classified in said first category together with first and second classification information, said first classification information relating to said first category, said second information relating to said second category[.].~~

~~wherein said step of classifying said extracted defect candidate image into said second category is performed by comparing a circuit pattern area and a defect area, said circuit pattern area being obtained from a reference image and corresponding to said defect area on said reference image, said defect area being derived from said imaging step, said extracted defect candidate image being extracted from said defect area.~~

10. (Previously Presented) The method for classifying defects as described in claim 9 wherein said imaging of said object is performed by illuminating and scanning an

electron beam focused on said object and detecting, in synchronization with said scanning, secondary electrons generated from said object by said illumination.

11. (Original) The method for classifying defects as described in claim 9 wherein an image of said defect candidate is also displayed on said screen.

12-22. (Canceled)

23. (Previously Presented) The method for classifying defects as described in claim 1 further comprising forming an image based on said secondary electrons generated from said inspected object by said illumination.

24. (Previously Presented) The method for classifying defects as described in claim 7 further comprising forming an image based on said secondary electrons generated from said inspected object by said illumination.

25. (Previously Presented) The method for classifying defects as described in claim 10 further comprising forming an image based on said secondary electrons generated from said inspected object by said illumination.

26. (Previously Presented) The method for classifying defects as described in claim 9 wherein said first category relates to defect type.

27. (Previously Presented) The method for classifying defects as described in claim 26 wherein said defect type includes particle defects, flaw defects, circuit pattern defects, and voltage contrast defects.

28. (Previously Presented) The method for classifying defects as described in claim 9 wherein said second category relates to defect criticality.

29. (Canceled)

30-32 (Canceled)

33. (New) The method of claim 9, wherein said calculated defect information including defect surface shape information, pattern defect information and voltage contrast defect information.